

What is claimed is:

1. A method for credit recovery of lost frames in an in-line credit extender coupled between a remote device
5 and a local device, comprising:
comparing received frame count and a first programmed
counter value when BB-SCs are received;
loading the difference between the programmed counter
value and the received frame count into a buffer and to
10 a first counter that counts each frame that is
transmitted; and
sending BB-SCs to the local device if there is a match
between the first counter value and a second programmed
counter value.
- 15 2. The method of Claim 1, wherein the first and the second
programmed counter values are the same.
3. The method of Claim 1, wherein number of buffer credits
lost are determined by the difference between the first
or second programmed counter value and the received
20 frame count.
4. A system for credit recovery of lost frames in an in-line credit extender coupled between a remote device
and a local device, comprising:
a first counter for counting received frames;

- a first programmable counter that is programmed with a value;
- a comparartor for comparing the first counter and the first programmable counter value when BB_SCs are received; and
- 5 a second counter for counting transmitted frames.
5. The system of Claim 4, further comprising:
- a second programmable counter whose value is compared to the second counter and if there is a match between
- 10 the two values, BB-SCs are sent to the local device.
6. The system of Claim 5, wherein the difference between the first counter value and first programmable counter value is loaded into a buffer and sent to the second counter that counts transmitted frames.
- 15 7. A method for credit recovery of lost R_RDYs in an in-line credit extender coupled between a remote device and a local device, comprising:
- counting received R_RDYs, wherein a first counter counts the received R_RDYs;
- 20 setting a flag when a BB_SCr is received; and
- transmitting BB-SCr when the first counter value is zero and the flag is set.
8. The method of Claim 7, further comprising:
- counting R_RDYs after BB_SCrs are received, wherein a
- 25 second counter counts the R_RDYs; and

transmitting R_RDYs when the second counter value is non-zero.

9. The method of Claim 7, wherein the first counter value is decreased everytime an R_RDY is transmitted.
- 5 10. The method of Claim 7, wherein the flag is cleared after a BB_SCr is transmitted.
11. The method of Claim 8, wherein the second counter is decremented everytime an R_RDY is transmitted.
12. A system for credit recovery of lost R_RDYs in an in-
10 line credit extender coupled between a remote device and a local device, comprising:
a first counter for counting received R_RDYs;
a second counter for counting R_RDYs received after BB_SCrS are received; and
15 a R_RDY control module that transmits R_RDYs when the first counter value is non-zero.
13. The system of Claim 12, further comprising:
a register that sets a flag when a BB_SCr is received;
and
20 a BB-SCr control module that transmits BB_SCrS when the first or second counter value is zero.
14. The system of Claim 12, wherein the first and second counter flip based upon when an R_RDY is received.